HCM-003-001522   Seat No. _____

B. Sc. (Sem. V) (CBCS) Examination

October – 2017

CA - 502 : Programming with Java

Faculty Code : 003
Subject Code : 001522

Time : $2\frac{1}{2}$ Hours]   [Total Marks : **70**

Instructions :   (1)   All questions are compulsory.

(2)   Figures on the right indicates full marks.

1   Attempt the following :   **20**

(1)   Which two types of programs can be created using Java?

(2)   Which mechanism binds together code and the data it manipulates, and keeps both safe from outside interference and misuse?

(3)   For which type of arguments Java has a Boolean type?

(4)   Which keyword has no return type, not even void?

(5)   What is used to inherit one class to another class?

(6)   Which method of thread is used to specify a maximum amount of time that you want to wait for specified thread to terminate?

(7)   Which is not a reserved keyword in Java?

(8)   Which operator is used to create and concatenate string?

(9)   Which block in exception contains any code that must be executed before a method returns?

(10)   Which method wake up the first thread that is called by object?

(11)   What is the vector class?

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(12) What is the use of super keyword in Java?

(13) What is used to create a Java thread?

(14) How can a class file from one package can be accessible to remote location of other package?

(15) Which character is written after value to be assigned to float variable for type casting?

(16) To what all numeric data types having size less than integer is promoted to at the time of equation evaluation?

(17) Of what type all real constants are by default?

(18) Which members are shared among objects?

(19) Which class cannot have child class?

(20) By what name Java language was initially called?

2 (A) Attempt any **Three** :   6

(1) Explain main Three characteristic of Java.

(2) Write about inheritance concept in Java.

(3) What is use of keyword super, extends and implements in Java ?

(4) Give the full form of JDK, JRE, JIT.

(5) Give the use of finally in exception handling in Java.

(6) Give the syntax of <Applet>.

(B) Answer the following : (Any **Three**)   9

(1) Write in brief about JVM.

(2) Define the term class and object with example.

(3) Draw program structure of Java with example.

(4) What is type conversion and type casting? Explain with example.

(5) Explain the use of exception and exception handing in Java.

(6) Write a note on wrapper class.

(C) Answer any **Two** : 10

(1) Write Java program to generate pyramid of given string from command line argument.

(2) What is Package? Explain how to define package with Java code.

(3) Write a note on Thread life cycle.

(4) Write a Java applet program that print color as background of an applet as selected from choice.

(5) Explain the Java Program Structure. Give the basic steps for creating, compiling and running a Java Program.

3 (A) Attempt any **Three** : 6

(1) What is an applet? How it is useful for web programming?

(2) Write in brief about Graphic class and its various methods.

(3) What is Exception handling? How it is useful?

(4) What is a class and object in Java?

(5) What is an Exception?

(6) What is Bean?

(B) Answer the following : (Any **Three**)   9

    (1) What are Visibility controls in Java?

    (2) How we can use the command line arguments in Java?

    (3) Define the term Portable.

    (4) Explain term Javac and Java.

    (5) Differentiate: Extends *v/s* Implements.

    (6) Explain the implementation of multiple inheritance in Java.

(C) Answer any **Two** :   10

    (1) Write a Java program that accept a number and print the sum of the digits.

    (2) Write a program code for an Applet life cycle with all its methods.

    (3) Write simple code of servlet to print "Hello" on browser.

    (4) Explain hierarchy level of Applet class.

    (5) Write an applet to draw the smiley face.

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